

TRANSFORMATIONS - Create Equations

Name _____ Date _____ Block _____

Write an equation that fits the given criteria.

You pick #s

- 1) A linear function that has a vertical shrink and is shifted up

$$f(x) =$$

- 2) A quadratic that is reflected over the x-axis, has a vertical stretch and is shifted right. ^{a is neg}

$$f(x) = -5(x - 2)^2$$

- 3) A square root that is reflected over the y-axis and shifted down.

$$f(x) =$$

- 4) A sine wave that has a vertical stretch, a horizontal shrink, and is shifted down.

$$f(x) =$$

- 5) An absolute value that is shifted left.

$$f(x) =$$

- 6) A natural log that has a vertical shrink and is reflected over the y-axis

$$f(x) =$$

- 7) An exponential that is shifted right and down.

$$f(x) =$$

- 8) An inverse function that has a horizontal shrink

$$f(x) =$$

- 9) A cubic function that has a horizontal stretch and is shifted up.

$$f(x) =$$

- 10) Create a transformed function of your own choosing and describe the transformations.